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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,876	11/13/2001	Mizuki Oike	216088US8	6261

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ALEXANDRIA, VA 22314

EXAMINER

THOMAS, BRANDI N

ART UNIT	PAPER NUMBER
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2873

DATE MAILED: 09/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/986,876

Applicant(s)

OIKE ET AL.

Examiner

Brandi N Thomas

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-12 is/are allowed.
- 6) ☒ Claim(s) 1 and 3-5 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: *Detailed Action*.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukushima et al. (5646399).

Regarding claim 1, Fukushima et al. discloses a wavelength locker module comprising: a prism (64) configured to divide incident light into at least first and second branched light beams (68 and 70) (figure 8); a wavelength selective filter (14) configured to permit part of the first branched light beam emitted from said prism to pass therethrough (col.2, lines 2-3); a first light quantity detector (32) for receiving the part of the first branched light beam having passed through said wavelength selective filter (14); a second light quantity detector (34) for directly receiving the second branched light beam emitted from the prism (col. 2, lines 4-5) (figure 3).

Regarding claim 4, Fukushima et al. discloses wherein said prism has a roof-shaped incident surface thereof comprised of first and second inclination surface (64c and 64d) each extending relative to a normal line of the incident light entering said prism, and said prism branches the incident light into said first and second light beams (68 and 70) (col. 6, lines 42-67).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukushima et al. (5646399).

Regarding claim 3, Fukushima et al. discloses the wavelength locker module further comprises an angle adjuster configured to variably adjust an orientation of said wavelength selective filter with respect to said prism, so that an incident angle of the first branched light into said wavelength filter (col. 6, lines 60-67) except that it does not show the branched light being adjusted to be in a range from 0 deg to 5 deg. It would have been obvious to one having ordinary skill in the art at the time the invention was made to adjust the light from 0 deg to 5 deg, since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

Regarding claim 5, Fukushima et al. discloses wherein an angle formed between each of said first and second inclination surfaces and the normal line of said first and second incident light to said prism except that it does not show the angle in a range from 10 deg to 65 deg. It would have been obvious to one having ordinary skill in the art at the time the invention was made to construct the angle to be in a range from 10 deg to 65 deg, since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 233.

***Allowable Subject Matter***

5. Claims 6-12 are allowed.

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6. Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the independent claim(s), in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in claim(s) 2 and 6-12, wherein the claimed invention comprises wherein the wavelength selective filter has a light transmission characteristic providing more that predetermined ratio of a change in optical transmittance to a change in wavelength of the incident light in a wavelength region and a wavelength variation suppressing mechanism which is configured to suppress the wavelength in accordance with a detection result obtained by said wavelength variation detector, as claimed.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Duncan et al. (5215597 B1) discloses an apparatus for correcting aberrations and image size in camera optics for multispectral cameras with color separating prisms.

Terashima (6456767 B2) discloses a planar-mounted waveguide transmitter-receiver module, in which a plurality of separated silicon substrates and a PLC substrate are provided.

May (US 2002/0041611 A1) discloses a method and system for locking transmission wavelengths for lasers in a dense wavelength division multiplexer utilizing a tunable etalon.

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Kojima (US 2002/0154858 A1) discloses a wavelength monitoring device provided with a deinterleaver for separating a multi-wavelength optical signal.

Ono Et al. (US 2002/0172243 A1) discloses a semiconductor laser module testing device for applying tests of various characteristics as an optical semiconductor to modules while fixing a wavelength.

Tatsuno et al. (US 2002/0051270 A1) discloses an optical system and its control system, which lock lasing wavelength of a laser light source to a specified value.

9. Applicant's arguments with respect to claims 1-12 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandi N Thomas whose telephone number is 703-308-3095.

The examiner can normally be reached on 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 703-308-4883. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-4883.

BNT

BNT

  
RICKY MACK  
PRIMARY EXAMINER